

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A mobile terminal, comprising:
a control unit;
a display unit;
an upper housing including said display unit;
a lower housing; and
a 2-axis hinge unit coupling the housings for folding and swinging movement of the upper housing relative to the lower housing about intersecting axes both of which are fixed relative to the lower housing;

wherein an end portion of said 2-axis hinge unit is exposed outside the terminal for viewing in a direction perpendicular to an upper surface of the lower housing in all positions of the upper housing, and an information input device is mounted in said end portion; and

wherein the information input device is a pointing device.

2. (original) The terminal according to claim 1, wherein the control unit controls the terminal according to an operation of the information input device.

3. (original) The terminal according to claim 1, wherein the control unit assigns a predetermined function to the information input device.

4. (canceled)

5. (previously presented) The terminal according to claim 1, wherein the control unit assigns another operating function to the pointing device.

6. (previously presented) The terminal according to claim 1, wherein the information input device further comprises a terminal operating function.

7. (original) The terminal according to claim 6, wherein the terminal operating function is performed by a press.

8. (original) The terminal according to claim 1, wherein the information input device is a fingerprint sensor.

9. (original) The terminal according to claim 8, wherein the control unit can operate the terminal when the fingerprint sensor detects a predetermined input.

10. (original) The terminal according to claim 1, further comprising position detection means for detecting relative positions between the upper housing and the lower housing.

11. (original) The terminal according to claim 10, wherein the control unit controls the terminal based on an output of the position detection means.

12. (original) The terminal according to claim 11, wherein the control unit controls an operation of the information input device.

13. (original) The terminal according to claim 10, wherein the position detection means comprise a magnet and a magnetic sensor.

14. (original) The terminal according to claim 13, wherein the magnet and the magnetic sensor are arranged in separate housings.

15. (original) The terminal according to claim 13, wherein the magnetic sensor is a Hall element.

16. (original) The terminal according to claim 10, wherein the position detection means detect a turning direction of the housings.

17. (original) The terminal according to claim 16, wherein the control unit controls the display unit based on the turning direction of the housings.

18. (original) The terminal according to claim 2, wherein the control unit detects an operation of a predetermined operation key to control an operation of the information input device.

19. (original) The terminal according to claim 18, wherein the control unit controls an operation of the information input device while a predetermined operation key is operated.

20. (original) The terminal according to claim 1, comprising a lock unit for locking said 2-axis hinge unit.

21. (original) The terminal according to claim 20, wherein the lock unit is controlled by an input from the information input device.

22. (original) The terminal according to claim 21, wherein the information input device is a personal authentication sensor; and

the lock unit is released when the sensor detects a predetermined input.

23. (original) The terminal according to claim 22, wherein the personal authentication sensor is a fingerprint sensor.

24. (original) The terminal according to claim 1, wherein the terminal is a mobile telephone.

25. (currently amended) The mobile terminal of claim 1, wherein the two axes of the 2-axis hinge unit are a folding axis and a horizontal rotation axis, the upper housing, the lower housing, and the 2-axis hinge unit being constructed and arranged so that said end portion of the 2-axis hinge unit on the horizontal rotation axis is exposed to an outside of the mobile terminal both when the mobile terminal is in an open position and when the mobile terminal is in a closed position.

26. (previously presented) The mobile terminal of claim 25, wherein said end portion is exposed on a side face of the lower housing.

27. (currently amended) The mobile terminal of claim 26, wherein the pointing device is arranged on said end portion of the 2-axis hinge unit.

28. (currently amended) A mobile terminal, comprising:
a lower housing;
a 2-axis hinge unit connected to the lower housing and providing two intersecting hinge axes that are fixed relative to said lower housing;

an upper housing connected to the 2-axis hinge unit for folding and swinging movement relative to the lower housing;

a display unit disposed on the upper housing;

a control unit; and

a button operatively connected to the control unit for user input;

wherein an end portion of said 2-axis hinge unit is exposed outside the terminal for viewing in a direction perpendicular to an upper surface of the lower housing in all positions of the upper housing, and the button is mounted in said end portion.

29. (currently amended) A mobile terminal which is foldable, comprising an upper housing including a display unit and a lower housing including an operation key unit, comprising:

a two-axis hinge unit having a horizontal rotation axis and a folding axis for coupling said upper housing and said lower housing, and adapting said housings for foldable rotation around said folding axis for an open-close operation and for horizontal rotation around said horizontal rotation axis, both said axes being fixed relative to said lower housing; and

an information input device arranged on top of one end portion [[or]] of said horizontal rotation axis, said input device being exposed to an outside of said mobile terminal for viewing in a direction perpendicular to an upper surface of said lower housing both when said mobile terminal is in a closed position and when said mobile terminal is in an open position.

30. (previously presented) The mobile terminal according to claim 29, wherein

said horizontal rotation axis is mounted on said lower housing with another end portion making a right angle with a surface of said housings; and

said folding axis is mounted in said upper housing, and is joined together with said horizontal rotation axis by crossing through said horizontal rotation axis at a right angle for providing said foldable rotation and said horizontal rotation to said upper housing.

31. (previously presented) The mobile terminal according to claim 30 further comprising a position detection

unit for detecting one of relative positions between said upper housing and said lower housing,

wherein said relative positions include a first position in which said upper housing is closed and overlaid on said lower housing and wherein said display unit and said operation key unit are facing each other, a second position in which said upper housing is opened from said first position by said foldable rotation, a third position in which said upper housing is turned 180 degrees from said first position by said horizontal rotation, a fourth position in which said upper housing is turned 90 degrees from said second position by said horizontal rotation, and a fifth position in which said upper housing is further turned 90 degrees from said fourth position by said horizontal rotation.

32. (previously presented) The mobile terminal according to claim 31, wherein said information input device is a pointing device for selecting a pointer shown on said display unit, and said mobile terminal further comprising a control unit to control an operation of said pointing device so as to disable said operation of said pointing device when said first position is detected by said position detection unit.

33. (previously presented) The mobile terminal according to claim 32, wherein said control unit controls a display operation based on said pointing device so as to select said pointer on said display unit of an opposite direction of

right and left when said third position is detected by said position detection unit.

34. (previously presented) The mobile terminal according to claim 31, wherein said position detection unit comprises a magnet and a magnet sensor each arranged in a different said housing from each other.

35. (previously presented) The mobile terminal according to claim 34, wherein said magnet sensor is a Hall element.

36. (previously presented) The mobile terminal according to claim 29, wherein said information input device is a fingerprint sensor.